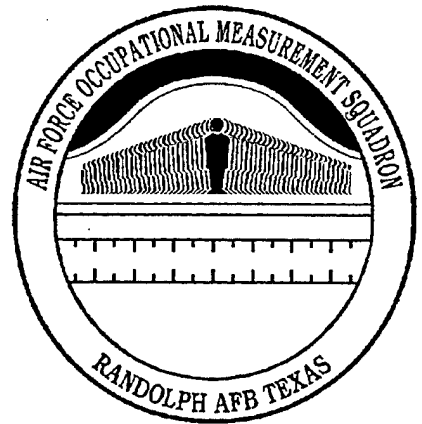




**UNITED STATES
AIR FORCE**



OCCUPATIONAL SURVEY REPORT

19960718 082

AVIONIC SENSORS MAINTENANCE

AFSC 2A1X1

AFPT 90-2A1-049

JUNE 1996

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449**

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PREFACE

This report presents the results of an Air Force occupational survey of the AFSC 2A1X1 Avionic Sensors Maintenance career ladder. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

Second Lieutenant Brandon K. Doan, Inventory Development Specialist, developed the survey instrument; Mrs. Joan St. John, Occupational Analyst, analyzed the data and wrote the final report. Mr. Wayne J. Fruge provided computer programming support, and Mr. Richard G. Ramos provided administrative support.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the Air Force Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB Texas 78150-4449 (DSN 487-6623).

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SUMMARY OF RESULTS

1. *Survey Coverage*: The Avionic Sensors Maintenance (AFSC 2A1X1) career ladder was surveyed to obtain current job and task data for use in updating career ladder training documents and the technical school training program. Survey results are based on data collected from 654 AFSC 2A1X1 personnel. This represents 59 percent of the total assigned population.
2. *Specialty Jobs*: Structure analysis of the AFSC 2A1X1 data identified 11 independent jobs: Low Altitude Navigation and Targeting Infrared for Night Systems (LANTIRN) Maintenance, Sensor Maintenance, Video Systems Maintenance, Infrared (IR) Maintenance, Pave Tack Maintenance, Advanced Synthetic Aperture Radar Systems (ASARS) Maintenance, Infrared Acquisition Designation Systems (IRADS) Maintenance, Photo Systems Maintenance, Supervision, Supply and Administration, and Training. These jobs are discussed within this report.
3. *Career Ladder Progression*: Normal career ladder progression within the AFSC 2A1X1 career ladder is evident. Three-skill level personnel spend the vast majority of their job time performing technical tasks involving LANTIRN Maintenance activities and IR Maintenance activities. At the 5-skill level, personnel are still involved in LANTIRN and IR activities, but begin to become involved with supervisory activities. Seven-skill level personnel reflect a greater shift toward supervisory and management work, although they are still involved with performing technical tasks. AFMAN 36-2108 *Specialty Description* provides a broad and generally accurate description of the technical and supervisory functions performed within the career ladder.
4. *Training Analysis*: First-enlistment members spend approximately 95 percent of their duty time devoted to technical and administrative or supply functions. The Specialty Training Standard (STS) is supported by survey data. Subject-matter experts, however, should carefully review the STS for possible fine-tuning of content and proficiency codes.
5. *Job Satisfaction Analysis*: In general, job satisfaction among AFSC 2A1X1 personnel is fairly high, with no serious satisfaction problems noted. Overall, personnel working in the ASARS Maintenance job had the lowest job satisfaction.
6. *Implications*: The AFSC 2A1X1 career ladder structure identified in this report is similar to that found in the 1990 Photo-Sensors Maintenance OSR. AFMAN 36-2108 *Specialty Description* accurately describes the jobs and tasks being performed. Job satisfaction is fairly high among career ladder incumbents. The STS provides comprehensive coverage of tasks performed by career ladder personnel across 11 jobs. Overall satisfaction was positive for the jobs identified.

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**OCCUPATIONAL SURVEY REPORT (OSR)
AVIONIC SENSORS MAINTENANCE CAREER LADDER
(AFSC 2A1X1)**

INTRODUCTION

This is a report of an occupational survey of the Avionic Sensors Maintenance career ladder conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron. The survey was conducted to obtain current job and task data. Data collected through this OSR will be utilized by training development personnel to review courses and related training documents in light of equipment and utilization changes which have occurred since the last OSR in 1990.

Background

As described in the AFMAN 36-2108 *Specialty Description* for AFSC 2A1X1, dated 31 October 1994, members are responsible for maintaining, repairing, inspecting and supervising maintenance actions on Avionic Sensor systems equipment such as infrared detector sets, closed circuit and low level television, optical cameras, data display sets, infrared map and digital recorders, laser target designator, laser receivers, terrain following radar, sensor control systems, and associated support equipment.

Initial 3-skill level training for AFSC 2A1X1 personnel is currently provided through a 126-day course (J3ABR2A131 000) at Sheppard AFB TX. This course includes Electronic Principles, sensor safety, Air Force technical publications and forms, maintenance management and maintenance inspection systems and forms, general maintenance practices, test equipment, principles of sensor systems, description of sensor systems, off-equipment maintenance of infrared mapping, cockpit television, airborne video recorders, and associated aerospace ground equipment (AGE). Entry into the career ladder currently requires Armed Forces Vocational Aptitude Battery minimum score of 72 Electronic, and strength factor of G (40 lbs).

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SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) AFPT 90-2A1-049, dated July 1994. The Inventory Developer prepared a tentative task list by reviewing pertinent career ladder publications, directives, and the previous JI and OSR. This task list was further refined and validated through personal interviews with 40 subject-matter experts (SMEs) representing a variety of major commands (MAJCOMs) at the following locations:

| <u>BASE</u> | <u>UNIT VISITED</u> |
|-----------------|--|
| Lowry AFB CO | 3450 TTS |
| Hurlburt Fld FL | 16 CRS |
| Eglin AFB FL | 33 MS |
| Moody AFB GA | 347 MS |
| Cannon AFB NM | 27 CRS |
| Holloman AFB NM | 49 MS |
| Beale AFB NM | 9 MS |
| Randolph AFB TX | Specialty Knowledge Test (SKT) Team, AFOMS/OMDR |

The resulting JI contained a comprehensive listing of 619 tasks grouped under 17 duty headings with a background section requesting such information as grade, MAJCOM, job title, time in present job, time in service, job satisfaction, functional area, organizational level, work schedule, type of aircraft on which sensors are maintained, type of inspections performed, video system test sets operated or maintained, video systems operated or maintained, camera systems operated or maintained, camera systems test sets operated or maintained, reconnaissance electronic sensor system test sets operated or maintained, tactical/real-time display electronic sensor systems operated or maintained, tactical/real-time display electronic sensor system test sets operated or maintained, support equipment operated or maintained, test equipment operated or maintained and forms used.

Survey Administration

Base training offices at operational bases worldwide administered the inventory to 1,104 DAFSC 2A1X1 personnel holding a 3-, 5-, or 7-skill level. Personnel excluded from taking the survey comprised the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring during the time inventories were administered to the field; and (4) personnel in their job less than 6 weeks. Members of the Air National Guard were also surveyed. Participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center.

Each individual who completed the inventory first filled in an identification and biographical information section and then checked each task performed in the member's current job. After checking all tasks performed, respondents then rated each task on a 9-point scale showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of the member's time spent on the job. First, the ratings are summed. Each task rating is then divided by the sum of task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

The final AFSC 2A1X1 survey sample includes responses from 654 Active Duty and Air National Guard job incumbents. Table 1 reflects the distribution, by MAJCOM, of assigned AFSC 2A1X1 personnel as of April 1994. The 654 respondents in the final sample represent 59 percent of all assigned AFSC 2A1X1 personnel. Table 2 reflects the distribution by paygrade. These figures show the sample is representative of the total enlisted population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2A1X1 personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

TABLE 1

MAJCOM REPRESENTATION OF ACTIVE DUTY IN SAMPLE

| COMMAND | PERCENT OF ACTIVE DUTY ASSIGNED | PERCENT OF ACTIVE DUTY SAMPLE |
|----------------|--|--|
| ACC | 51 | 48 |
| AFSOC | 16 | 17 |
| AETC | 10 | 12 |
| PACAF | 9 | 8 |
| USAFE | 8 | 8 |
| AFMC | 5 | 6 |
| OTHER | 1 | 1 |

| | |
|---------------------------------------|-------|
| Total Active Duty Assigned: | 1,083 |
| Total ANG Assigned: | 237 |
| Total Assigned: | 1,320 |
| Total Active Duty Eligible: | 977 |
| Total ANG Eligible: | 231 |
| Total Eligible: | 1,228 |
| Total Active Duty In Sample: | 569 |
| Total ANG In Sample: | 85 |
| Total Sample: | 654 |
| Percent of Active Eligible in Sample: | 66% |
| Percent of Surveyed in Sample: | 59% |

* As of April 1994

TABLE 2
PAYGRADE DISTRIBUTION OF SAMPLE

| <u>PAYGRADE</u> | <u>PERCENT OF ASSIGNED*</u> | <u>PERCENT OF SAMPLE</u> |
|-----------------|-------------------------------------|------------------------------|
| E-1 TO E-3 | 42 | 43 |
| E-4 | 29 | 29 |
| E-5 | 17 | 17 |
| E-6 | 11 | 10 |
| E-7 | ** | ** |

* As of December 1993

** Denotes less than 1 percent

NOTE: Columns may not add exactly to 100 percent due to rounding

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 41 senior AFSC NCOs who completed a TE booklet were asked to select tasks they felt require some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided by resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. There was acceptable agreement among the 41 raters. The average TE rating was 2.14, with a standard deviation of 2.38. Any task with a TE rating of 4.52 or above is considered to have high TE.

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 44 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting AFS entry-level jobs.

SPECIALTY JOBS (Career Ladder Structure)

Each Air Force occupational analysis begins with an examination of the career ladder structure. The structure of jobs within the Avionic Sensors Maintenance career ladder was examined on the basis of similarity of tasks performed and the percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

Each individual in the sample performs a set of tasks called a *Job*. A hierarchical grouping program, which is a basic part of the Comprehensive Occupational Data Analysis Program system, creates an individual job description for each respondent (all the tasks performed by that individual and the relative amount of time spent on those tasks). It then compares each job description to every other job description in terms of tasks performed and the relative amount of time spent on each task in the JI. The automated program locates the two job descriptions with the most similar tasks and percent time ratings and combines them to form a composite job description. In successive stages, the program adds new members to the initial group or forms new groups based on the similarity of tasks performed and similar time ratings in the individual job descriptions.

When there is a substantial degree of similarity between jobs, they are grouped together and identified as a *Cluster*. The job structure resulting from this grouping process (the various jobs and clusters within the career ladder) can be used to evaluate the accuracy of career ladder documents (Career Field Education and Training Plans (CFETP), AFMAN 36-2108 *Specialty Description*, and Specialty Training Standards (STS)), and to gain a better understanding of current utilization patterns

Overview of Specialty Jobs

Based on the similarity of tasks performed and the amount of time spent performing each task, 11 jobs were identified within the AFSC 2A1X1 survey sample. A listing of these jobs is provided below and illustrated in Figure 1. The stage (ST) number shown beside each title references computer-generated information; the letter "N" stands for the number of personnel in each group.

- I. LOW ALTITUDE NAVIGATION AND TARGETING INFRARED FOR NIGHT SYSTEMS (LANTIRN) MAINTENANCE (STG102, N=172)
- II. SENSOR MAINTENANCE (STG069, N=33)
- III. VIDEO SYSTEMS MAINTENANCE (STG074, N=116)
- IV. INFRARED (IR) MAINTENANCE (STG066, N=92)
- V. PAVE TACK MAINTENANCE (STG068, N=39)
- VI. ADVANCED SYNTHETIC APERTURE RADAR SYSTEMS (ASARS) MAINTENANCE (STG135, N=11)
- VII. INFRARED ACQUISITION DESIGNATION SYSTEMS (IRADS) MAINTENANCE (STG159, N=12)
- VIII. PHOTO SYSTEMS MAINTENANCE (STG096, N=13)
- IX. SUPERVISION (STG067, N=68)
- X. SUPPLY AND ADMINISTRATION (STG077, N=9)
- XI. TRAINING (STG046, N=10)

AFSC 2A1X1 CAREER LADDER JOBS

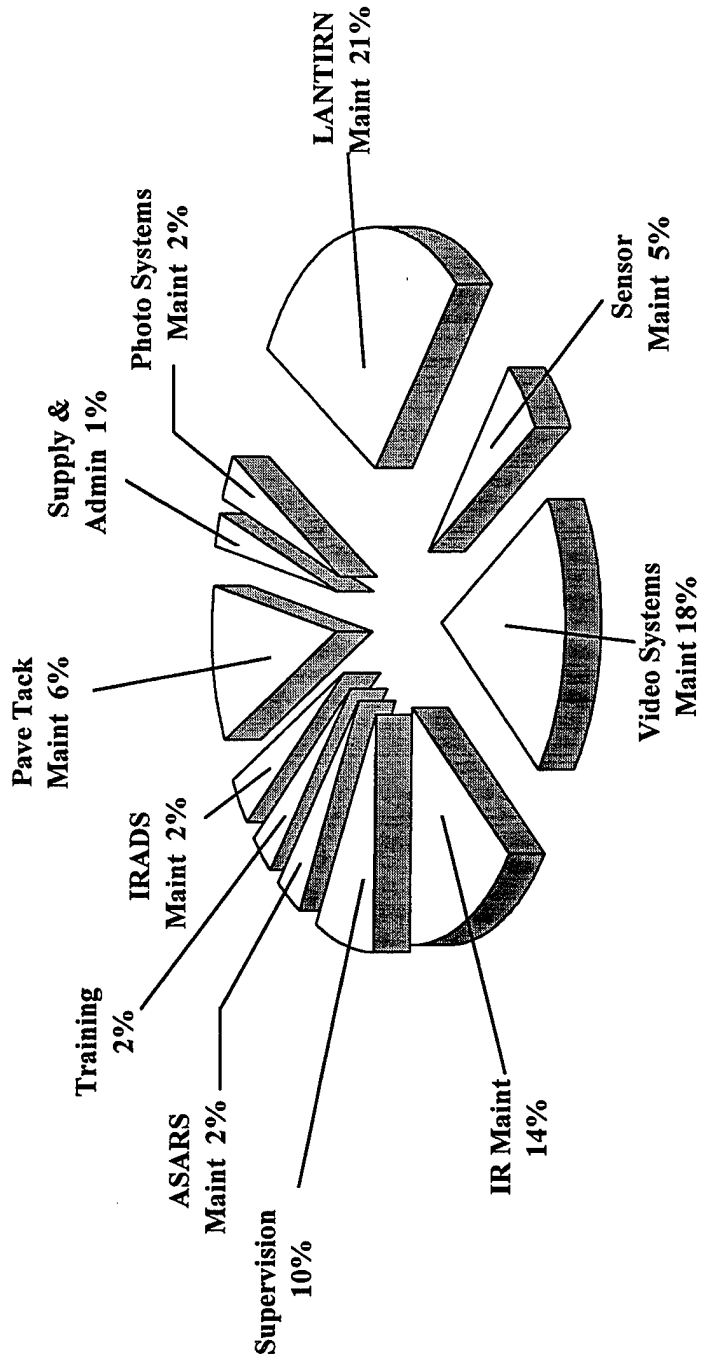


FIGURE 1

The respondents forming these groups account for 88 percent of the survey sample. The remaining 12 percent are performing tasks or a series of tasks that do not group with any of the defined jobs. Examples of job titles for these people include: Job Controller, Hazardous Material Manager, Element Member, Gold Flag Program Manager, Logistics Computer Manager, Research Analyst, Circuit Card Technician, and Local Checklist Manager.

Group Descriptions

The following paragraphs contain brief descriptions of the 11 jobs identified through the career ladder structure analysis. Also presented are two tables that reflect the time incumbents spend on duties and selected background data for each group. Table 3 presents the relative time spent by respondents in each job across each duty listed in the JI. Table 4 displays selected background information, such as DAFSC distributions across each group, average of total months in active military service (i.e., Total Active Federal Military Service (TAFMS)), and average number of tasks performed. Appendix A at the back of this OSR lists representative tasks performed by members of each group.

I. LOW ALTITUDE NAVIGATION AND TARGETING INFRARED FOR NIGHT SYSTEMS (LANTIRN) MAINTENANCE (STG102, N=172). This job primarily involves maintenance of LANTIRN. LANTIRN maintenance personnel have the broadest maintenance job in the career ladder, as they perform an average of 159 tasks. This job is performed by the largest number of personnel. Of the 172 personnel in this job, 3 are in Guard units. This job is distinguished by the amount of time members spend performing LANTIRN activities (44 percent of their relative job time, see Table 3). Representative tasks for this job include:

- remove or install targeting set CEUs
- remove or install LANTIRN ECUs
- perform functional tests on targeting sets
- remove or install nose equipment support assemblies (NESAS)
- perform targeting set focus adjustments
- remove or install targeting set roll section assemblies
- perform target acquisition forward looking (FLIR) to deroll alignments
- remove or install navigation or targeting set computers
- perform functional tests on navigation or targeting set environmental control units (ECUs)
- perform targeting set drift and deroll biases
- perform navigation or targeting set dead-channel strap alignments
- perform targeting set FLIR line of site (LOS) to pitch axis alignments

TABLE 3

AVERAGE PERCENT TIME SPENT ON DUTIES BY AFSC 2A1X1 JOB GROUPS

| DUTIES | LANTIRN MAINT (STG102) | SENSOR MAINT (STG069) | VIDEO SYS MAINT (STG074) | IR MAINT (STG066) | PAVE TACK MAINT (STG068) | ASARS MAINT (STG135) |
|---|------------------------------|-----------------------------|--------------------------------|-------------------------|--------------------------------|----------------------------|
| A ORGANIZING & PLANNING | 2 | 3 | 5 | 4 | 3 | 5 |
| B DIRECTING & IMPLEMENTING | 2 | 2 | 4 | 4 | 3 | 5 |
| C EVALUATING & INSPECTING | 2 | 3 | 4 | 4 | 3 | 4 |
| D TRAINING | 2 | 3 | 3 | 3 | 0 | 4 |
| E PERFORMING GENERAL ADMINISTRATIVE & SUPPLY ACTIVITIES | 6 | 6 | 9 | 8 | 5 | 10 |
| F PERFORMING GENERAL MAINTENANCE ON SENSOR SYSTEMS | 23 | 54 | 31 | 35 | 34 | 30 |
| G MAINTAINING LOW ALTITUDE NAVIGATION & TARGETING INFRARED FOR NIGHT (LANTIRN) SYSTEMS | 44 | 0 | 2 | * | 1 | 0 |
| H MAINTAINING PAVE TACK AN/AVQ-26 SYSTEMS | * | 3 | 0 | 1 | 29 | 0 |
| I MAINTAINING INFRARED (IR) SYSTEMS | * | 5 | * | 18 | 1 | 0 |
| J MAINTAINING LOW LIGHT LEVEL TELEVISION SYSTEMS & NIGHT VISION DEVICES | * | 0 | 0 | 6 | 0 | 0 |
| K MAINTAINING VIDEO RECORDING & COCKPIT TELEVISION SYSTEMS | 6 | 4 | 22 | 2 | 4 | 0 |
| L MAINTAINING PAVE PENNY AN/AAS-35 SYSTEMS | 1 | 0 | 7 | 0 | 0 | 0 |
| M MAINTAINING INFRARED ACQUISITION DESIGNATION SYSTEMS | 0 | * | 1 | 0 | 0 | 0 |
| N MAINTAINING ADVANCED SYNTHETIC APERTURE RADAR SYSTEMS | 0 | 0 | 0 | 0 | 0 | 28 |
| O MAINTAINING CAMERA SYSTEMS | 0 | 3 | * | * | 1 | 0 |
| P PERFORMING CROSS UTILIZATION TRAINING (CUT) TASKS | * | 3 | 1 | 2 | 1 | 1 |
| Q PERFORMING CORE AUTOMATED MAINTENANCE SYSTEMS (CAMS) ACTIVITIES | 11 | 10 | 12 | 14 | 13 | 14 |

* Denotes Less than 1 percent

NOTE: Columns may not add exactly to 100 percent due to rounding

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY AFSC 2A1X1 JOB GROUPS

| DUTIES | IRADS | PHOTO | SUPV | SUPPLY & | TRAINING |
|---|-------------------|--------------------------|----------|-------------------|----------|
| | MAINT (STG159) | SYS MAINT (STG096) | (STG067) | ADMIN (STG077) | (STG046) |
| A ORGANIZING & PLANNING | 3 | 7 | 18 | 19 | 8 |
| B DIRECTING & IMPLEMENTING | 3 | 4 | 14 | 8 | 5 |
| C EVALUATING & INSPECTING | 2 | 5 | 16 | 15 | 6 |
| D TRAINING | 3 | 3 | 10 | 7 | 34 |
| E PERFORMING GENERAL ADMIN & SUPPLY ACTIVITIES | 4 | 9 | 18 | 38 | 12 |
| F PERFORMING GENERAL MAINTENANCE ON SENSOR SYSTEMS | 40 | 29 | 7 | 8 | 20 |
| G MAINTAINING LOW ALTITUDE NAVIGATION & TARGETING INFRARED FOR NIGHT (LANTIRN) SYSTEMS | 0 | 0 | 1 | 1 | 4 |
| H MAINTAINING PAVE TACK AN/AVQ-26 SYSTEMS | 0 | 0 | 1 | 0 | 5 |
| I MAINTAINING INFRARED (IR) SYSTEMS | 5 | 0 | 1 | 0 | * |
| J MAINTAINING LOW LIGHT LEVEL TELEVISION SYSTEMS & NIGHT VISION DEVICES | 0 | 0 | * | 0 | 0 |
| K MAINTAINING VIDEO RECORDING & COCKPIT TELEVISION SYSTEMS | 5 | 0 | 1 | 1 | 4 |
| L MAINTAINING PAVE PENNY AN/AAS-35 SYSTEMS | 0 | 0 | * | 0 | 0 |
| M MAINTAINING INFRARED ACQUISITION DESIGNATION SYSTEMS | 24 | 0 | * | 0 | 0 |
| N MAINTAINING ADVANCED SYNTHETIC APERTURE RADAR SYSTEMS | 0 | * | 0 | 0 | 0 |
| O MAINTAINING CAMERA SYSTEMS | 0 | 29 | * | 0 | 0 |
| P PERFORMING CROSS UTILIZATION TRAINING (CUT) TASKS | * | * | * | 0 | 0 |
| Q PERFORMING CORE AUTOMATED MAINTENANCE SYSTEMS (CAMS) ACTIVITIES | 11 | 14 | 13 | 4 | 1 |

* Denotes less than 1 percent

NOTE: Columns may not add exactly to 100 percent due to rounding

TABLE 4

SELECTED BACKGROUND DATA FOR AFSC 2A1X1 CAREER LADDER JOBS

| | LANTIRN MAINT (STG102) | SENSOR MAINT (STG069) | VIDEO SYSTEMS MAINT (STG074) | IR MAINT (STG066) | PAVE TACK MAINT (STG068) | ASARS MAINT (STG135) |
|-----------------------------------|------------------------------|-----------------------------|---------------------------------------|-------------------------|-----------------------------------|----------------------------|
| NUMBER IN GROUP | 172 | 33 | 116 | 92 | 39 | 11 |
| PERCENT OF SAMPLE | 26% | 5% | 18% | 14% | 6% | 2% |
| PERCENT IN CONUS | 75% | 37% | 78% | 76% | 100% | 100% |
| DAFSC DISTRIBUTION: | | | | | | |
| 2A131 | 29% | 9% | 9% | 25% | 18% | 18% |
| 2A151 | 53% | 52% | 52% | 45% | 67% | 64% |
| 2A171 | 18% | 39% | 39% | 30% | 15% | 18% |
| PREDOMINANT PAYGRADE(S) | | | | | | |
| | E-4 | E-4/5 | E-5 | E-3/4/5 | E-4 | E3/4/5 |
| AVERAGE MONTHS IN SERVICE (TAFMS) | 82 | 100 | 112 | 92 | 75 | 89 |
| PERCENT IN FIRST ENLISTMENT | 42% | 27% | 21% | 31% | 44% | 36% |
| AVERAGE # OF TASKS PERFORMED | 159 | 63 | 129 | 128 | 107 | 119 |
| PERCENT SUPERVISING | 41% | 39% | 49% | 39% | 33% | 45% |

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR AFSC 2A1X1 CAREER LADDER JOBS

| | IRADS MAINT (STG159) | PHOTO SYS MAINT (STG096) | SUPV (STG067) | SUPPLY & ADMIN (STG077) | TRAINING (STG046) |
|-----------------------------------|----------------------------|--------------------------------|------------------|-------------------------------|----------------------|
| NUMBER IN GROUP | 12 | 13 | 68 | 9 | 10 |
| PERCENT OF SAMPLE | 2% | 2% | 10% | 1% | 2% |
| PERCENT IN CONUS | 100% | 100% | 82% | 67% | 100% |
| DAFSC DISTRIBUTION: | | | | | |
| 2A131 | 33% | 15% | 1% | 0% | 0% |
| 2A151 | 50% | 46% | 1% | 22% | 80% |
| 2A171 | 17% | 38% | 97% | 78% | 20% |
| PREDOMINANT PAYGRADE(S) | | | | | |
| | E-4/5 | E-4/5 | E-6/7 | E-5/6/7 | E-4/5 |
| AVERAGE MONTHS IN SERVICE (TAFMS) | | | | | |
| | 87 | 98 | 190 | 180 | 101 |
| PERCENT IN FIRST ENLISTMENT | | | | | |
| | 33% | 23% | 1% | 0% | 0% |
| AVERAGE # OF TASKS PERFORMED | | | | | |
| | 81 | 112 | 128 | 69 | 47 |
| PERCENT SUPERVISING | | | | | |
| | 42% | 54% | 96% | 44% | 0% |

Fifty-three percent of those holding this job have a 5-skill level and average 82 months TAFMS. The forty-two percent that are in their first enlistment suggests that the LANTIRN job also has some experienced members performing this job. Seventy-five percent are assigned to the CONUS. The predominant paygrades are E-3 through E-5.

II. SENSOR MAINTENANCE (STG069, N=33). Five percent of the total sample indicate they maintain sensor systems. Because personnel average nearly two-thirds fewer tasks (63), than the previous job, this job is more limited. Fifty-four percent of their job time involves performing maintenance on sensor systems. Unlike the first job, 11 of the job incumbents are in the Air National Guard. Examples of tasks most commonly performed include:

- read or interpret schematics
- operate aerospace ground equipment (AGE)
- read or interpret wiring diagrams
- remove or replace line replacement units (LRUs)
- remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers
- connect or disconnect power to aircraft
- remove or replace cockpit control panels
- perform continuity checks

Personnel in this job average 100 months TAFMS, with 27 percent in their first enlistment. Fifty-two percent hold the 5-skill level. Seventy-three percent are in the CONUS. The predominant paygrades are E-4 and E-5.

III. VIDEO SYSTEMS MAINTENANCE (STG074, N=116). The primary function of this job is that of maintaining video recordings and cockpit television systems. Of the 116 members in this group, 41 are in the Air National Guard. This job is distinguished from the other jobs by the time members spend in Duty K, Maintaining Video Recordings and Cockpit Television Systems (22 percent, see Table 3). This is a somewhat broad job as the AFSC 2A1X1 personnel with it perform an average of 129 tasks, including the following:

- bench check AVTRs
- clean and demagnetize video recording systems
- perform soldering
- evaluate videotape for system malfunctions
- operationally check AVTRs
- clear or close out completed maintenance discrepancies in CAMS
- read or interpret schematics

- remove or replace circuit card assemblies
- access core automated maintenance systems (CAMS) menus and data screens

The majority of personnel with this job hold the 5-skill level, average 112 months TAFMS and are in paygrades E-3 through E-7. Seventy-eight percent are in the CONUS.

IV. INFRARED (IR) MAINTENANCE (STG066, N=92). Incumbents perform an average of 128 tasks, with 18 percent of their time spent in Duty I, Maintaining Infrared (IR) Systems. Of the 92 respondents, 4 are in the Air National Guard. Members with this job are distinguished by the time they spend on the following tasks:

- remove or replace line replacement units (LRUs)
- perform soldering
- remove or replace circuit card assemblies
- read or interpret schematics
- clean optics or windows
- perform corrosion control
- troubleshoot or repair IR receivers
- connect or disconnect power to aircraft
- remove or replace IR SRUs
- debrief aircrews
- align or adjust electronic components on circuit cards
- perform IR gains and balances

Respondents holding this job are moderately experienced, averaging slightly more than 8 years time in service. Forty-five percent hold the 5-skill level. The majority are in paygrades E-3 through E-6 and 31 percent are in their first enlistment.

V. PAVE TACK MAINTENANCE (STG068, N=39). This job is performed by 6 percent of the survey sample. All respondents report being on Active Duty. They perform an average of 107 tasks, and are distinguished by the time they spend maintaining Pave Tack AN/AVQ-26 Systems (35 percent). Members in this job bench check, repair, or adjust Pave Tack pitch instrument assemblies (PIIAS) and roll instrument assemblies (RIAS), remove or replace Pave Tack SRUs and operationally check Pave Tack Systems. Typical tasks performed by members with this job include:

- clean optics or windows
- bench check, repair, or adjust Pave Tack pitch instrument assemblies (PPIAS)
- remove or replace Pave Tack SRUs
- bench check, repair, or adjust Pave Tack Roll instrument assemblies (RIAS)
- clear or close out completed maintenance discrepancies in CAMS
- access core automated maintenance system (CAMS) menus and data screens
- read or interpret wiring diagrams
- operationally check Pave Tack systems
- lubricate mechanical components
- perform corrosion control
- perform continuity checks
- remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers

Respondents holding this job are moderately experienced averaging slightly more than 6 years time in service. Forty-four percent are in their first enlistment and 64 percent are in paygrade E-4. Sixty-seven percent hold the 5-skill level.

VI. ADVANCED SYNTHETIC APERTURE RADAR SYSTEMS (ASARS) MAINTENANCE (STG135, N=11). This job primarily involves ASARS. Personnel all report being on Active Duty and perform an average of 119 tasks. They include bench checking, operating, and removing and replacing ASARS components. Incumbents spend 28 percent of their time on Duty N, Maintaining ASARS (see Table 3). Members with this job are distinguished by the time they spend on the following tasks:

- remove or replace lower U-2 Q-bay hatches
- perform ASARS prelaunch checks
- operationally check ASARS
- operate aerospace ground equipment
- remove or replace ASARS noses
- pressurize sensor systems
- input data into CAMS
- remove or replace ASARS PCU SRUs
- bench check or repair ASARS processor control units (PCUs)
- perform corrosion control
- remove or replace ASARS DCRSs
- clear or close out completed maintenance discrepancies in CAMS
- remove or replace Airborne Radar System (ARS) fiber optics
- remove or replace cockpit control panels

- perform voltage checks
- palletize sensor system equipment
- don or doff protective clothing, such as aprons, goggles, or gloves

The majority of personnel hold the 5-skill level. One hundred percent are in the CONUS. Average time in service is 89 months, and 36 percent of the incumbents are in their first enlistment. The predominant paygrade is E-7.

VII. INFRARED ACQUISITION DESIGNATION SYSTEMS (IRADS) MAINTENANCE (STG159, N=12). Personnel with this job spend 24 percent of their time performing Duty M, Maintaining Infrared Acquisition Designation Systems (see Table 3). All report being on Active Duty and perform an average of 81 tasks. They include assembling and disassembling IRADS components, performing performance tests, and removing and replacing IRADS components. IRADS maintenance personnel are easily distinguished by the time they spend performing the following tasks:

- assemble or disassemble Infrared Acquisition Designation System (IRADS) turrets
- perform IRADS turret minimum performance tests
- perform IRADS laser system alignments
- perform fault isolation tests on IRADS turrets
- perform IRADS turret drive and resolver alignments
- assess Core Automated Maintenance System (CAMS) menus and data screens
- perform IRADS VTSC minimum performance tests
- perform IRADS VTSC fault isolation tests
- remove or replace IRADS VTSC SRUs
- perform IRADS Video Tracker Servo Control (VTSC) electrical alignments
- clean optics or windows
- clean bearings
- align or adjust optics assembly fields-of-view

All members are assigned to the CONUS. Fifty percent of the members hold a 5-skill level and average 87 months TAFMS. Thirty-three percent of the incumbents are in their first enlistment, and the predominant paygrades are E-4 and E-5.

VIII. PHOTO SYSTEMS MAINTENANCE (STG096, N=13). This job is performed by 2 percent of the sample, who spend 29 percent of their duty time maintaining camera systems. As with the previous three jobs, all incumbents report being on Active Duty. They perform an

average of 112 tasks. Their responsibilities include performing preflight and postflight checks on cameras, bench checking camera systems, salvaging waste film, uploading and downloading cameras, and performing camera temperature stabilization. Members with this job are distinguished by the time they spend on the following tasks:

- purge driftsights
- bench check or repair T-35 camera systems
- perform T-35 camera preflight or postflight checks
- perform iris camera preflight or postflight checks with test and checkout consoles
- bench check or repair iris camera systems
- perform iris camera temperature stabilization
- upload or download iris cameras
- upload or download iris camera film
- clear or close out completed maintenance discrepancies in CAMS
- perform iris camera preflight or postflight checks with flyway kits
- salvage waste film
- perform soldering
- perform F-489 camera preflight or postflight checks
- clear or close out completed maintenance discrepancies in CAMS

Thirty-eight percent of the personnel in this job hold the 7-skill level. Twenty-three percent are in their first enlistment. The average time in service is 93 months and the average number of tasks performed is 112.

IX. SUPERVISION (STG067, N=68). This nontechnical job is distinguished because incumbents spend most of their time on supervisory and administrative duties. These include counseling, evaluating subordinates, assigning projects and determining work priorities. Personnel with this job spend 66 percent of their time performing these functions. Of the 68 members in this job, 2 are in the Air National Guard. AFSC 2A1X1 personnel with the supervision job are distinguished by the time they spend performing the following tasks:

- determine or establish work priorities
- assign projects, maintenance, or repair work
- conduct performance feedback sessions
- participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting
- write EPRs
- inspect personnel for compliance with military standards

counsel personnel on personal matters
interpret policies, directives, or procedures for subordinates
review messages

Respondents holding this job perform an average of 128 tasks. Ninety-seven percent hold the 7-skill level. Incumbents average 178 months TAFMS and only 1 percent are in their first enlistment.

X. SUPPLY AND ADMINISTRATION (STG077, N=9). This job is performed by the fewest respondents in the career ladder (only 1 percent of the respondents) and, like the previous job, is also a nontechnical job. Job responsibilities include such tasks as initiating electronic mail, determining logistics requirements, coordinating with appropriate agencies on supply matters and reviewing messages. These functions are shown by the following tasks members in this job spend most time performing:

participate in meetings, such as staff meetings, briefings,
conferences, and workshops, other than conducting
determine or establish logistics requirements, such as personnel,
equipment, space, tools, or supplies
initiate electronic mail (E-Mail)
review messages
identify and report equipment or supply problems
coordinate supply matters with appropriate agencies
research supply requisition data, such as supply catalogs or master
cross-reference listings (MCRLS)
maintain administrative files
coordinate obtaining TDY orders, passports, or visas with appropriate
agencies
review drafts of regulations, manuals, or other directives
coordinate local purchases of equipment or supplies with appropriate
agencies

Members perform an average of 69 tasks. Incumbents are in paygrades E-5 through E-8. None are in their first enlistment. Average time in services 178 months. Eighty percent hold the 5-skill level, with the three remaining holding the 7-skill level.

XI. TRAINING (STG046, N=10). Personnel in this job are all assigned to the school at Sheppard AFB TX and are responsible for providing formal training to career ladder incumbents. Respondents with this job are distinguished from other jobs because they spend 34

percent of their duty time performing training tasks. These include classroom teaching, developing tests, counseling trainees, and developing training aids. The following tasks distinguish this job from others in the career field:

- counsel trainees on training progress
- conduct resident course classroom training
- evaluate progress of trainees
- administer or score tests
- construct or develop training materials or aids
- write test questions
- maintain training records, charts, graphs, or files

Personnel with the training job hold either the 5- or 7-skill level. They are in paygrades E-4 and E-5 and average 101 months TAFMS, and none are in their first enlistment. They perform an average of 47 tasks.

Comparison of Current Jobs to Previous Survey Findings

The results of the specialty job analysis were compared to those of the last Avionic Sensors Maintenance OSR published in 1990. Although the job titles vary among the two studies, generally the tasks that personnel in these studies perform are the same. As shown in Table 5, six jobs in the current study were identified in the 1990 OSR. Of the remaining 5 jobs, 3 deal with new sensor systems. However, three jobs in the 1990 survey that were not identified as distinct jobs in the present survey. These are TISEO Maintenance, Pave Penny Maintenance, and Forward Looking Infrared Radar (FLIR) Maintenance.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may be used to evaluate how well career ladder documents, such as the CFETP, AFMAN 36-2108 *Specialty Description*, and the STS, reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the 10 career ladder jobs is displayed in Table 6, while Table 7 offers another perspective by displaying the relative percent time spent on each duty across the skill-level groups.

TABLE 5
COMPARISON OF JOB GROUPS IN CURRENT STUDY
VERSUS 1990 STUDY

| 1996 STUDY (N=654) | 1990 STUDY (N=1065) |
|---------------------------|--|
| Supervision | Administrative and Supervisory |
| Supervision | Shop Supervision |
| Training | Resident Course Instructor |
| Supply and Administration | Administrative and Supervisory |
| Pave Tack Maintenance | In-Shop Pave Tack Maintenance |
| Pave Tack Maintenance | Flightline Pave Tack Maintenance |
| Video Systems Maintenance | Video Systems Maintenance |
| Photo Systems Maintenance | In Shop Tactical Camera Maintenance |
| Photo Systems Maintenance | Flightline Tactical Camera Maintenance |
| Photo Systems Maintenance | Strategic Camera Maintenance |
| LANTIRN Maintenance | Not Identified |
| Sensor Maintenance | Not Identified |
| IR Maintenance | Not Identified |
| ASARS Maintenance | Not Identified |
| IRADS Maintenance | Not Identified |
| Not Identified | Pave Penny Maintenance |
| Not Identified | TISEO Maintenance |
| Not Identified | Forward Looking Infrared Radar Maint |

TABLE 6

**DISTRIBUTION OF SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)**

| JOB | DAFSC 2A131 (N=108) | DAFSC 2A151 (N=296) | DAFSC 2A171 (N=250) |
|---------------------------------|------------------------------------|------------------------------------|------------------------------------|
| I. LANTIRN Maintenance | 46 | 31 | 12 |
| II. Sensor Maintenance | 3 | 6 | 5 |
| III. Video Systems Maintenance | 10 | 20 | 18 |
| IV. IR Maintenance | 21 | 14 | 11 |
| V. Pave Tack Maintenance | 7 | 9 | 2 |
| VI. ASARS Maintenance | 2 | 2 | 1 |
| VII. IRADS Maintenance | 4 | 2 | 1 |
| VIII. Photo Systems Maintenance | 2 | 2 | 2 |
| IX. Supervision | 1 | * | 26 |
| X. Supply and Administration | 0 | 1 | 3 |
| XI. Training | 0 | 3 | 1 |
| XI. Not Grouped | 4 | 10 | 15 |

*Denotes less than 1 percent

TABLE 7
TIME SPENT ON DUTIES BY MEMBERS OF SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)

| DUTIES | DAFSC | DAFSC | DAFSC |
|---|------------------|------------------|------------------|
| | 2A131 (N=108) | 2A151 (N=296) | 2A171 (N=250) |
| A ORGANIZING AND PLANNING | 1 | 3 | 12 |
| B DIRECTING AND IMPLEMENTING | 1 | 3 | 9 |
| C EVALUATING AND INSPECTING | 1 | 3 | 10 |
| D TRAINING | 1 | 4 | 8 |
| E PERFORMING GENERAL ADMINISTRATIVE & SUPPLY ACTIVITIES | 5 | 8 | 14 |
| F PERFORMING GENERAL MAINTENANCE ON SENSOR SYSTEMS | 32 | 31 | 17 |
| G MAINTAINING LOW ALTITUDE NAVIGATION AND TARGETING INFRARED FOR NIGHT (LANTIRN) SYSTEMS | 25 | 15 | 5 |
| H MAINTAINING PAVE TACK AN/AVQ-26 SYSTEMS | 2 | 3 | 1 |
| I MAINTAINING INFRARED (IR) SYSTEMS | 6 | 3 | 2 |
| J MAINTAINING LOW LIGHT LEVEL TV SYSTEMS & NIGHT VISION DEVICES | 2 | 1 | 1 |
| K MAINTAINING VIDEO RECORDING & COCKPIT TV SYSTEMS | 6 | 9 | 5 |
| L MAINTAINING PAVE PENNY AN/AAS-35 SYSTEMS | 2 | 2 | 2 |
| M MAINTAINING INFRARED ACQUISITION DESIGNATION SYSTEMS | 1 | 1 | 1 |
| N MAINTAINING ADVANCED SYNTHETIC APERTURE RADAR SYSTEMS | 1 | 1 | * |
| O MAINTAINING CAMERA SYSTEMS | 1 | 1 | 1 |
| P PERFORMING CROSS UTILIZATION TRAINING (CUT) TASKS | 1 | 1 | 1 |
| Q PERFORMING CORE AUTOMATED MAINTENANCE SYSTEMS (CAMS) ACTIVITIES | 12 | 11 | 10 |

* Denotes less than 100 percent

A typical pattern of progression is noted within the AFSC 2A1X1 career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time performing Avionic Sensors maintenance activities. As incumbents move up to the 7-skill level, higher percentages perform supervision functions, but they still spend some time on technical activities (see Tables 6 and 7).

Skill-Level Descriptions

DAFSC 2A131. The 108 airmen in the 3-skill level group, representing 17 percent of the survey sample, spend most of their job time on LANTIRN Maintenance and general maintenance of Sensor Systems activities (see Table 7). Forty-six percent are working in the LANTIRN Maintenance job (see Table 6). The focus of their job is shown by figures in Table 8, which lists representative tasks performed by 3-skill level incumbents. Most tasks listed relate to Duty F (Performing General Maintenance on Sensor Systems).

DAFSC 2A151. The 296 airmen in the 5-skill level group represent 45 percent of the total survey sample. As with 3-skill level personnel, the largest percentages of these incumbents are working in the LANTIRN Maintenance job (31 percent). Time on duties show a slight increase in time spent on supervisory duties (see Table 7).

Representative tasks performed by 5-skill level incumbents are listed in Table 9. Table 10 reflects those tasks which best differentiate 5-skill level personnel from their 3-skill level counterparts. Figures show the jobs are quite similar, except a higher percentage of 5-skill level personnel perform some supervisory tasks.

DAFSC 2A171. Seven-skill level personnel represent 38 percent of the survey sample. Unlike their junior counterparts at the 3- and 5-skill levels, a larger percentage of these 250 personnel perform supervisory duties (See Table 7). Twenty-six percent of 7-skill level personnel perform the Supervision job, while 12 percent are in the LANTIRN Maintenance job (See Table 6). Table 11 lists the most common tasks performed by 7-skill level personnel. Most of these tasks involve supervisory functions. Table 12 shows those tasks that best differentiate the 5- and 7-skill levels. As expected, the key difference is a greater emphasis on supervisory and administrative functions at the 7-skill level.

Summary

Progression in this career ladder follows a normal pattern of highly technical job focus at the lower skill levels with a broadening into supervision at the 7-skill level. Emphasis is seen in performing primarily LANTIRN Systems Maintenance activities at the 3- and 5-skill levels.

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A131 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N= 108) |
|--|-------------------------------------|
| F217 Perform soldering | 92 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 91 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 90 |
| F197 Clean optics or windows | 90 |
| F226 Remove or replace circuit card assemblies | 86 |
| F233 Remove or replace line of replacement units (LRUs) | 85 |
| F225 Remove or replace cable assemblies | 84 |
| F182 Align or adjust electronic components on circuit boards | 83 |
| F212 Perform corrosion control | 81 |
| Q605 Input data in CAMS | 81 |
| F211 Perform continuity checks | 81 |
| F200 Construct or repair cables or test plugs | 80 |
| F222 Read or interpret schematics | 80 |
| F218 Perform voltage checks | 79 |
| F239 Safety wire equipment | 79 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 77 |
| F220 Read or interpret block diagrams | 77 |
| F208 Pack or unpack sensor system equipment | 77 |
| F223 Read or interpret wiring diagrams | 75 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 75 |
| F213 Perform preventive maintenance inspections (PMIs) | 71 |
| Q596 Create equipment maintenance discrepancies in CAMS | 69 |
| F207 Operate aerospace ground equipment (AGE) | 69 |
| F242 Troubleshoot support equipment | 69 |
| F219 Pressurize sensor systems | 68 |
| F205 Lubricate mechanical components | 65 |
| F236 Remove or replace seals | 65 |
| F184 Align or adjust gimbals | 64 |
| E137 Inventory equipment, tools, or supplies | 62 |
| F181 Align or adjust collimators | 60 |

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A151 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N=296) |
|--|------------------------------------|
| F217 Perform soldering | 84 |
| F233 Remove or replace line of replacement units (LRUs) | 81 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 81 |
| F197 Clean optics or windows | 80 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 80 |
| F222 Read or interpret schematics | 78 |
| F212 Perform corrosion control | 78 |
| F223 Read or interpret wiring diagrams | 78 |
| F226 Remove or replace circuit card assemblies | 78 |
| F211 Perform continuity checks | 76 |
| F225 Remove or replace cable assemblies | 76 |
| F182 Align or adjust electronic components on circuit cards | 74 |
| F218 Perform voltage checks | 73 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 73 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 72 |
| Q605 Input data in CAMS | 72 |
| F220 Read or interpret block diagrams | 72 |
| F207 Operate aerospace ground equipment | 71 |
| F200 Construct or repair cables or test plugs | 70 |
| F208 Pack or unpack sensor system equipment | 68 |
| F239 Safety wire equipment | 67 |
| F242 Troubleshoot support equipment | 66 |

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 2A131 AND DAFSC 2A151 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A1431 (N=108) | 2A1451 (N=296) | DIFFERENCE |
|--|-------------------|-------------------|------------|
| D92 Conduct OJT | 10 | 53 | -43 |
| B51 Supervise Avionic Sensors Maintenance Apprentices (AFSC 2A131) | 8 | 47 | -39 |
| D96 Counsel trainees on personal matters | 3 | 34 | -31 |
| A2 Assign projects, maintenance, or repair work | 9 | 38 | -29 |
| C72 Evaluate personnel for compliance with performance standards or technical orders | 3 | 30 | -27 |
| B34 Counsel personnel on personal matters | 3 | 30 | -27 |
| D107 Evaluate progress of trainees | 2 | 29 | -27 |
| C82 Inspect personnel compliance with military standards | 2 | 28 | -26 |
| C58 Conduct performance feedback sessions | 2 | 28 | -26 |
| B52 Supervise Avionic Sensors Maintenance Craftsmen (AFSC 2A151) | 2 | 28 | -26 |
| C86 Write EPRs | 1 | 27 | -26 |
| A17 Establish performance standards for subordinates | 3 | 25 | -22 |
| A8 Determine or establish work priorities | 15 | 37 | -22 |
| D106 Evaluate personnel for training needs | 2 | 23 | -21 |

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A171 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N= 250) |
|---|--|
| A20 Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting | 80 |
| A8 Determine or establish work priorities | 79 |
| A2 Assign projects, maintenance, or repair work | 77 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 74 |
| C58 Conduct performance feedbacks | 72 |
| B34 Counsel personnel on personal matters | 70 |
| B52 Supervise Avionic Sensors Maintenance Craftsmen (AFSC 2A151) | 69 |
| C86 Write EPRs | 68 |
| C82 Inspect personal for compliance with military standards | 68 |
| D92 Conduct OJT | 68 |
| F223 Read or interpret wiring diagrams | 67 |
| F222 Read or interpret schematics | 67 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 66 |
| D107 Evaluate progress of trainees | 66 |
| D96 Counsel trainees on training progress | 65 |
| A23 Plan or schedule work assignments or priorities | 64 |
| Q586 Analyze CAMS data | 64 |
| C72 Evaluate personnel for compliance with performance standards or technical orders | 63 |
| Q605 Input data in CAMS | 63 |
| E137 Inventory equipment, tools, or supplies | 62 |
| B48 Interpret policies, directives or procedures for subordinates | 62 |
| E118 Compile information for records, reports, or logs | 62 |
| D109 Maintain training records, charts, graphs, or files | 61 |
| F226 Remove or replace circuit card assemblies | 61 |
| F218 Perform voltage checks | 60 |
| D106 Evaluate personnel for training needs | 60 |
| A17 Establish performance standards for subordinates | 60 |
| F233 Remove or replace line of replacement units (LRUs) | 60 |

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSC 2A151 AND DAFSC 2A171 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A151 (N=296) | 2A171 (N=250) | DIFFERENCE |
|---|------------------|------------------|------------|
| F197 Clean optics or windows | 80 | 53 | 27 |
| F177 Adjust extend or retract components | 51 | 27 | 24 |
| F212 Perform corrosion control | 78 | 54 | 24 |
| K424 Align or adjust airborne videotape recorder (AVTR) drum speeds | 48 | 25 | 23 |
| ----- | | | |
| A20 Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting | 36 | 80 | -44 |
| A19 Establish work schedules | 13 | 56 | -43 |
| A8 Determine or establish work priorities | 37 | 79 | -42 |
| B53 Supervise Avionic Sensors Maintenance Journeymen (AFSC 2A171) | 4 | 46 | -45 |
| A23 Plan or schedule work assignments or priorities | 23 | 64 | -41 |
| C82 Inspect personnel for compliance with military standards | 27 | 68 | -41 |
| B52 Supervise Avionic Sensors Maintenance Craftsmen (AFSC 2A151) | 28 | 69 | -41 |
| C86 Write EPRs | 27 | 68 | -41 |
| A6 Determine or establish logistics requirements, such as personnel, equipment, space, tools, or supplies | 14 | 54 | -40 |
| B34 Counsel personnel on personal matters | 30 | 70 | -40 |
| A29 Schedule personnel for temporary duty (TDY) assignments, leaves, or passes | 4 | 44 | -40 |

ANALYSIS OF AFMAN 36-2108 *SPECIALTY DESCRIPTION*

Survey data were compared to the AFMAN 36-2108 *Specialty Description* for Avionic Sensors Maintenance, effective 31 October 1994. This specialty description is intended to provide a broad overview of the duties and responsibilities of each skill level. In general, the specialty description covers tasks and jobs performed by career ladder personnel.

TRAINING ANALYSIS

Occupational survey data represent one of many sources of information that are used to assist in the development of training programs for career ladder personnel. OSR data useful to training personnel include job descriptions for the various jobs performed within a career ladder, distribution of personnel across career ladder jobs, percentages of personnel performing specific tasks, and percentages of personnel maintaining specific equipment or systems, as well as the difficulty of tasks and TE ratings gathered from senior members of the career ladder.

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can help technical school personnel decide which entry-level training tasks to emphasize. These ratings, based on the judgments of senior career ladder NCOs at operational units, provide training personnel with a rank ordering of those tasks considered important for first-enlistment airman training (TE), and a measure of the difficulty of those tasks (TD). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel. This decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To help training personnel focus on tasks that are most appropriate for entry-level training, an additional factor, the Automated Training Indicator (ATI), was assigned to each task in the inventory. A computer program considered percent first-enlistment members performing, TE and TD ratings, and the Course Training Decision Logic Table found in AETCR 52-22, Atch 1, and assigned an ATI value to each task corresponding to the 18 training decisions on the table. The decision table and explanation of ATIs precede the listing of tasks in descending order of ATI in the TRAINING EXTRACT. Training personnel should focus on tasks with an ATI of 18, which suggests these tasks should be in the entry-level course.

Tasks having the highest TE ratings are listed in Table 13. Included for each task are the percentage of first-job and first-enlistment personnel performing and the TD rating. Tasks with the highest TE deal with Performing General Maintenance on Sensor Systems (Duty F), also most are performed by fairly high percentages.

Table 14 lists the tasks having the highest TD ratings. The percentages of first-job, first-enlistment, 5-, and 7-skill level personnel performing, and the TE ratings are also included for each task. Most tasks with high TD ratings deal with performing LANTIRN Maintenance functions and also have a high TE rating.

Various lists of tasks, accompanied by TE and TD ratings, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TD and TE ratings, see the Task Factor Administration in the SURVEY METHODOLOGY section of this report.

First-Enlistment Personnel

In this study, there are 175 members in their first enlistment (1-48 months TAFMS) representing 27 percent of the survey sample. As displayed in Table 15, approximately 95 percent of their duty time is devoted to technical functions. Figure 2 shows how all first-enlistment personnel are distributed across the jobs identified in the SPECIALTY JOBS section of this report. Of the 11 jobs identified, a vast majority of personnel (41 percent) are involved in LANTIRN Maintenance activities.

Table 16 displays commonly performed tasks for first-enlistment personnel. Majority of tasks displayed involve general maintenance on sensor systems. Equipment utilized by 30 percent or more of first-job or first-enlistment personnel are listed in Table 17.

Specialty Training Standard (STS)

In March 1996, training personnel from Sheppard AFB TX matched tasks in the JI to appropriate sections of the STS. A listing of the STS was then produced showing each STS paragraph and subparagraph, tasks matched, percent criterion group members performing, TE and TD ratings, and ATI. This listing is included in the Training Extract sent to the school for review. Criteria set forth in ATCR 52-22 Attachment 1, were used to review the relevance of each STS paragraph and subparagraph with matched tasks.

General STS elements, such as Security, AF Occupational Safety and Health Program, USAF Graduate Evaluation Program, Environmental Awareness and Compliance, Supervision, and Training, (paragraphs 1 through 7) were not reviewed. Technical areas covering STS paragraphs 8 through 15 were thoroughly reviewed against OSR data. Most were supported in that tasks matched to the STS paragraphs had at least 20 percent of one criterion group performing the matched tasks. Typically, STS areas having matched tasks that have sufficiently

TABLE 13

DAFSC 2A1X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

| TASKS | TNG EMP | PERCENT MEMBERS PERFORMING | | | | TSK DIF |
|-------|------------|----------------------------------|----|------------|------|------------|
| | | 1ST JOB | | 1ST ENL | | |
| | | | | | | |
| F222 | 6.73 | 86 | 79 | 79 | 6.12 | |
| F223 | 6.71 | 75 | 76 | 76 | 5.79 | |
| F217 | 6.63 | 93 | 90 | 90 | 4.70 | |
| Q605 | 6.32 | 71 | 77 | 77 | 4.01 | |
| F218 | 6.24 | 71 | 77 | 77 | 3.99 | |
| F220 | 6.02 | 79 | 74 | 74 | 4.84 | |
| F211 | 5.85 | 79 | 77 | 77 | 3.93 | |
| Q585 | 5.63 | 93 | 88 | 88 | 3.27 | |
| F212 | 5.56 | 86 | 78 | 78 | 3.87 | |
| Q593 | 5.56 | 86 | 91 | 91 | 4.13 | |
| F182 | 5.39 | 75 | 78 | 78 | 4.99 | |
| F224 | 5.39 | 46 | 53 | 53 | 5.41 | |
| F239 | 5.37 | 68 | 77 | 77 | 3.88 | |
| F197 | 5.37 | 68 | 77 | 77 | 3.88 | |
| F200 | 5.27 | 75 | 78 | 78 | 5.18 | |
| F192 | 5.24 | 36 | 47 | 47 | 5.80 | |
| F233 | 5.15 | 93 | 86 | 86 | 3.65 | |
| F231 | 5.10 | 54 | 52 | 52 | 5.54 | |
| F189 | 5.07 | 36 | 43 | 43 | 5.94 | |
| F184 | 5.05 | 61 | 58 | 58 | 5.94 | |

TD MEAN = 5.00; SD = 1.00

TE MEAN = 2.14; SD = 1.48 (HIGH TE = 3.62)

TABLE 14

DAFSC 2AIX1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

| TASKS | TSK DIF | PERCENT MEMBERS PERFORMING | | | | | | TNG EMP | | |
|-------|--|-------------------------------|----|------------|----|----------------|----|------------|----------------|--|
| | | 1ST JOB | | 1ST ENL | | DAFSC 3E451 | | | DAFSC 3E471 | |
| | | | | | | | | | | |
| G311 | Troubleshoot or repair LANTIRN intermediate automatic test equipment (LIATE) | 8.15 | 39 | 42 | 32 | 15 | 15 | 4.22 | | |
| G313 | Troubleshoot or repair LANTIRN radio frequency augmentation unit test stands | 7.63 | 29 | 39 | 29 | 14 | 14 | 3.88 | | |
| N506 | Repair ASARS computer interface station (CIS) test stations | 7.41 | 4 | 1 | 1 | 0 | 0 | .93 | | |
| N516 | Troubleshoot ASARS CIS test stations | 7.41 | 4 | 1 | 1 | 0 | 0 | .95 | | |
| H345 | Troubleshoot Pave Tack cradle systems | 7.34 | 7 | 8 | 8 | 3 | 3 | 2.00 | | |
| P578 | Tear down or build helicopters | 7.30 | 43 | 43 | 30 | 15 | 15 | 4.12 | | |
| G212 | Troubleshoot or repair LANTIRN power supply test stations (PSTSs) | 7.30 | 43 | 43 | 30 | 15 | 15 | 4.12 | | |
| N515 | Troubleshoot ASARS antenna test stations | 7.23 | 4 | 1 | 2 | 1 | 1 | .95 | | |
| H343 | Repair Pave Tack ECU | 7.21 | 4 | 6 | 6 | 2 | 2 | 2.22 | | |
| G310 | Repair NESAs | 7.14 | 36 | 42 | 32 | 14 | 14 | 3.49 | | |
| I395 | Troubleshoot or repair IR receivers | 7.05 | 36 | 21 | 17 | 15 | 15 | 2.56 | | |
| N520 | Troubleshoot ASARS receiver/exciter test stations | 7.05 | 4 | 1 | 2 | 0 | 0 | .95 | | |
| N521 | Troubleshoot ASARS transmitter test stations | 7.05 | 4 | 1 | 2 | 0 | 0 | .95 | | |
| N519 | Troubleshoot ASARS PCU test stations | 7.05 | 4 | 1 | 2 | 0 | 0 | .95 | | |

TD MEAN = 5.00 SD = 1.00
 TE MEAN = 2.14; SD = 1.48 (HIGH TE = 3.62)

TABLE 15

**RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES BY
FIRST-ENLISTMENT AFSC 2A1X1 PERSONNEL**

| DUTIES | PERCENT TIME SPENT |
|---|--------------------------|
| A ORGANIZING AND PLANNING | 2 |
| B DIRECTING AND IMPLEMENTING | 1 |
| C EVALUATING AND INSPECTING | 1 |
| D TRAINING | 1 |
| E PERFORMING GENERAL ADMINISTRATIVE & SUPPLY ACTIVITIES | 6 |
| F PERFORMING GENERAL MAINTENANCE ON SENSOR SYSTEMS | 33 |
| G MAINTAINING LOW ALTITUDE NAVIGATION AND TARGETING INFRARED FOR NIGHT (LANTIRN) SYSTEMS | 22 |
| H MAINTAINING PAVE TACK AN/AVQ-26 SYSTEMS | 3 |
| I MAINTAINING INFRARED (IR) SYSTEMS | 4 |
| J MAINTAINING LOW LIGHT LEVEL TELEVISION SYSTEMS & NIGHT VISION DEVICES | 1 |
| K MAINTAINING VIDEO RECORDING & COCKPIT TELEVISION SYSTEMS | 8 |
| L MAINTAINING PAVE PENNY AN/AAS-35 SYSTEMS | 2 |
| M MAINTAINING INFRARED ACQUISITION DESIGNATION SYSTEMS | 1 |
| N MAINTAINING INFRARED ADVANCED SYNTHETIC APERATURE RADAR SYSTEMS | 1 |
| O MAINTAINING CAMERA SYSTEMS | 1 |
| P PERFORMING CROSS UTILIZATION TRAINING (CUT) TASKS | 1 |
| Q PERFORMING CORE AUTOMATED MAINTENANCE SYSTEMS (CAMS) ACTIVITIES | 12 |

AFSC 2A1X1 FIRST-ENLISTMENT JOBS

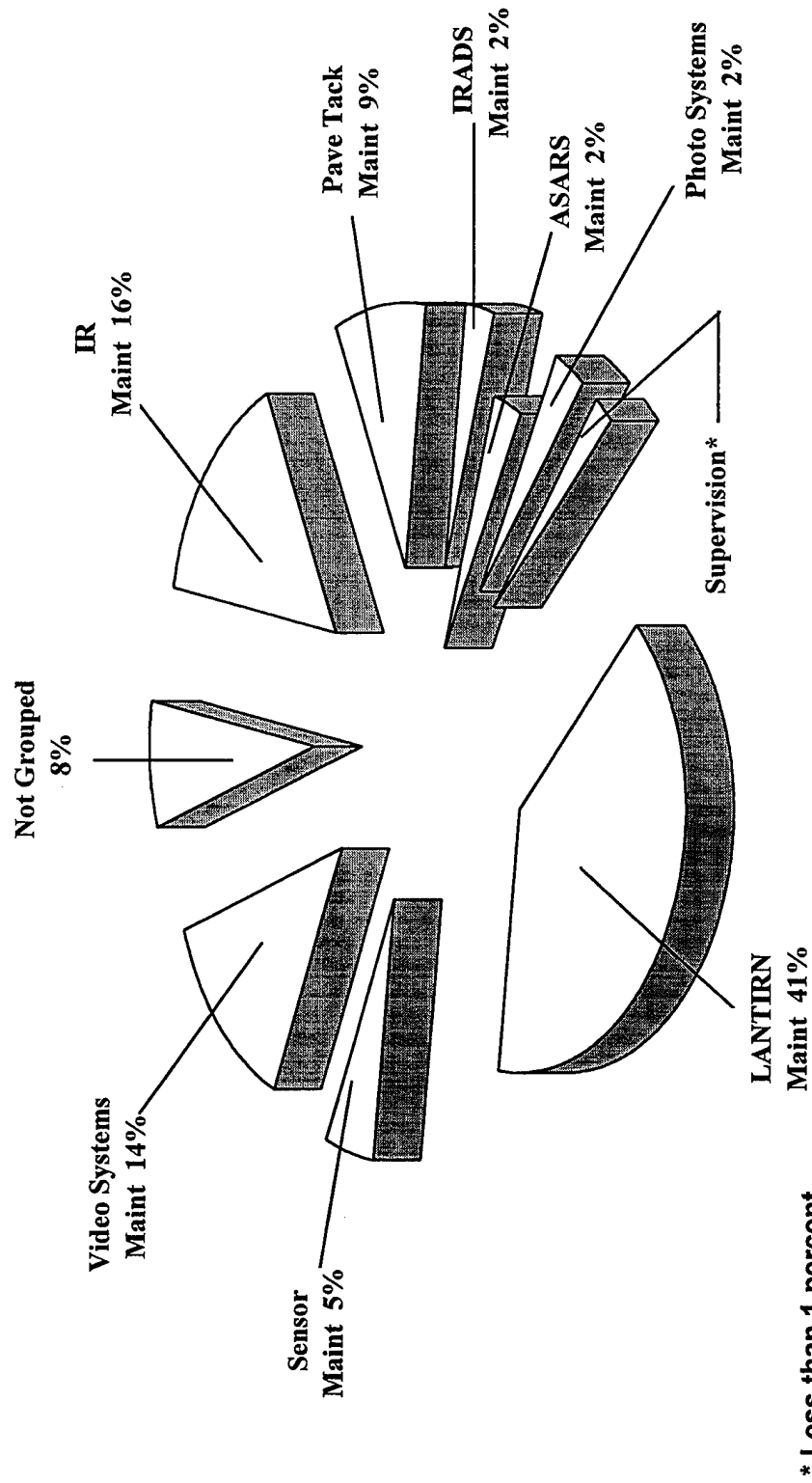


FIGURE 2

TABLE 16

**MOST COMMONLY PERFORMED TASKS FOR
FIRST-ENLISTMENT 2A1X1 PERSONNEL**

| TASKS | PERCENT MEMBERS PERFORMING (N=175) |
|--|---|
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 91 |
| F217 Perform soldering | 90 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 88 |
| F197 Clean optics and windows | 87 |
| F233 Remove or replace line of replacement units (LRUs) | 86 |
| F226 Remove or replace circuit card assemblies | 82 |
| F222 Read or interpret schematics | 79 |
| F225 Remove or replace cable assemblies | 79 |
| F182 Align or adjust electronic components on circuit cards | 78 |
| Q605 Input data in CAMS | 78 |
| F212 Perform corrosion control | 78 |
| F200 Construct or repair cables or test plugs | 78 |
| F218 Perform voltage checks | 77 |
| F211 Perform continuity checks | 77 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 76 |
| F223 Read or interpret wiring diagrams | 76 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 74 |
| F220 Read or interpret block diagrams | 74 |
| F208 Pack or unpack sensor system equipment | 74 |
| F207 Operate aerospace ground equipment (AGE) | 70 |
| F242 Troubleshoot support equipment | 68 |
| F213 Perform preventive maintenance inspections (PMIs) | 67 |
| Q596 Create equipment maintenance discrepancies in CAMS | 67 |
| Q591 Change CAMS workcenter event narratives | 64 |
| F205 Lubricate mechanical components | 63 |
| E137 Inventory equipment, tools, and supplies | 62 |
| F236 Remove or replace seals | 61 |
| F230 Remove or replace desiccant | 61 |
| F219 Pressurize sensor systems | 60 |
| K436 Clean and demagnetize video recording systems | 58 |
| K439 Operationally check AVTRs | 58 |
| K433 Bench check AVTRs | 58 |
| F181 Align or adjust gimbals | 58 |

TABLE 17

**EQUIPMENT TOOLS AND SUPPORT EQUIPMENT USED BY MORE THAN 30 PERCENT
OF FIRST-JOB OR FIRST-ENLISTMENT
AFSC 2A1X1 PERSONNEL**

| | 2A1X1 1ST JOB (N=24) | 2A1X1 1ST ENL (N=175) |
|---|----------------------------|-----------------------------|
| <u>SUPPORT EQUIPMENT</u> | | |
| Collimator, shop | 46 | 41 |
| Coolant Servicing Unit (CSU) | 39 | 42 |
| Demagnetizer | 61 | 65 |
| Fluid Conditioning Unit (FCU) | 39 | 41 |
| Frequency Converter, 400 Hz | 46 | 51 |
| Ground Power Unit | 54 | 37 |
| Hoist | 54 | 50 |
| Lightalls | 46 | 37 |
| Portable Data Tester (PDT) | 25 | 31 |
| Soldering Station | 75 | 78 |
| Torque Wrench | 79 | 79 |
| <u>TEST EQUIPMENT</u> | | |
| Attenuator | 21 | 30 |
| Boresighting Tools | 46 | 48 |
| Breakout Box | 29 | 45 |
| Circuit Card Extender | 61 | 55 |
| Dial Gauge | 18 | 35 |
| Environmental Control Unit (ECU) Servicing Unit | 39 | 49 |
| Freon Recycling Unit | 14 | 34 |
| 8 Frequency Converter | 43 | 45 |
| Frequency Counter | 21 | 41 |
| Leak Detector | 32 | 33 |
| Logic Analyzer | 32 | 34 |
| Micrometer | 46 | 42 |
| Multimeter | 89 | 90 |
| Oscilloscope | 64 | 78 |
| Oscilloscope, Digital | 68 | 65 |
| Pulse/Function Generator | 43 | 46 |
| Signal Generator, Audio | 25 | 49 |
| Spectrum Analyzer | 29 | 34 |
| Tension Gauge | 32 | 45 |
| Video Monitor | 57 | 68 |
| Voltmeter | 64 | 65 |

high TE and TD ratings, and are performed by at least 20 percent of personnel in appropriate experience or skill-level groups (such as first-enlistment (1-48 months TAFMS) and 5-and 7-skill level groups), should be retained in the STS. On the other hand, STS areas having tasks with less than 20 percent performing across all of these groups should be considered for deletion. Using this standard approach, 71 entries in the STS were not supported by OSR data. Examples of these entries are listed in Table 18. A complete listing of the STS paragraphs, with OSR data displayed for each of these criterion groups, can be found in the TRAINING EXTRACT report that accompanies this OSR. Training personnel and SMEs should carefully review these areas to determine if inclusion in future revisions to the STS is warranted.

Tasks not matched to any element of the STS are listed at the end of the STS computer listing. Only 5 technical tasks performed by more than 20 percent of criterion group members were not matched to the STS. The functional community and training personnel need to review these technical tasks for inclusion in the STS. They involve performing general maintenance on sensor systems, CAMS activities, and LANTIRN maintenance (see Table 19).

JOB SATISFACTION ANALYSIS

An examination of responses to the job satisfaction questions can give career ladder managers a better understanding of some of the factors that may affect the job performance of airmen in the career ladder. The survey booklet included questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were then analyzed by making several comparisons: (1) among TAFMS groups of the Avionic Sensors Maintenance career ladder and a comparative sample of personnel from other Mission Equipment Maintenance career ladders surveyed in 1994 (AFSCs 2A5X2, 2A6X4, 2A7X2, 2A7X4, 2E3X1, 2F0X1, and 2W1X1); (2) between current and previous survey experience groups; and (3) across specialty groups identified in the **SPECIALTY JOBS** section of the report.

Table 20 compares first-enlistment (1-48 months TAFMS), second-enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data to corresponding enlistment groups from other Logistics AFSCs surveyed during the previous calendar year. These data give a relative measure of how the job satisfaction of AFSC 2A1X1 personnel compares with similar Air Force specialties. Overall, satisfaction for all three TAFMS groups in AFSC 2A1X1 is fairly high, with no serious satisfaction problems noted except for the Perceived Use of Training and Sense of Accomplishment for all TAFMS groups where data was lower than the comparative sample.

Comparison of job satisfaction indicator responses of the current survey TAFMS groups to TAFMS groups in the AFSC 455X0A and 455XOB 1990 survey (see Table 21) indicates that generally the 1996 responses are higher than the 1990 responses.

TABLE 18

EXAMPLES OF
STS ITEMS NOT SUPPORTED BY OSR DATA
(PERCENT MEMBERS PERFORMING)

| STS REFERENCE/TASKS | 3-LVL CRSE PROF CODE | TNG EMP | PCT 1ST ENL (N=175) | MBSRS 5-SKILL LVL (N=296) | PERF 7-SKILL LVL (N=250) | TSK DIF |
|---|-------------------------------|------------|---------------------------|------------------------------------|-----------------------------------|------------|
| | | | | | | |
| <i>11 DIRECT SUPPORT EQUIP FUNDAMENTALS</i> | | | | | | |
| 11b(3) Verify Functional Integrity | | | | | | |
| F215 Perform pulse generator checks | 2b | 2.44 | 18 | 13 | 13 | 4.70 |
| <i>14 OFF-EQUIPMENT MAINTENANCE</i> | | | | | | |
| 14b Pav Tack, AVQ-26 | | | | | | |
| 14b(1) Perform Operational Check | - | 2.76 | 9 | 8 | 3 | 6.00 |
| H332 Bench check Pav Tack pods | | | | | | |
| <i>15 ON EQUIPMENT MAINTENANCE</i> | | | | | | |
| 15a Pav Tack, AVQ-26 | | | | | | |
| 15a(3) Remove and Install Pod | - | 2.02 | 10 | 9 | 4 | 4.82 |
| H340 Remove or replace Pav Tack cradles | | | | | | |
| <i>15 ON EQUIPMENT MAINTENANCE</i> | | | | | | |
| 15e AAQ-18 Infrared System | | | | | | |
| 15e(7) Slave Synchro Alignment | - | 2.27 | 9 | 8 | 6 | 4.67 |
| I36 Align AN/AAQ-18 IR system slave synchronizers | | | | | | |

TABLE 19

TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE 2A1X1
GROUP MEMBERS BUT NOT REFERENCED BY STS
(PERCENT MEMBERS PERFORMING)

| STS REFERENCE/TASKS | TNG EMP | PCT | | MBRS | | PERF | | TSK DIF |
|---|------------|--------------------|--|---------------------------|--|---------------------------|--|------------|
| | | 1ST ENL (N=175) | | 5-SKILL LVL (N=296) | | 7-SKILL LVL (N=250) | | |
| F180 Align or adjust cockpit control panels | 3.29 | 23 | | 35 | | 27 | | 3.98 |
| F207 Operate aerospace ground equipment | 4.22 | 70 | | 71 | | 58 | | 3.80 |
| F241 Tow sensor systems | 2.68 | 27 | | 25 | | 18 | | 2.95 |
| G285 Remove or install targeting set center section assembly SRUs | 3.88 | 41 | | 33 | | 15 | | 5.18 |
| Q619 Verify accuracy of daily input in CAMS | 2.61 | 23 | | 27 | | 49 | | 4.71 |

TABLE 20

JOB SATISFACTION INDICATORS FOR AFSC 2A1X1 TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

| | 1-48 MONTHS TAFMS | | 49-96 MONTHS TAFMS | | 97+ MONTHS TAFMS | |
|--|--------------------------|----------------------------|--------------------------|----------------------------|--------------------------|----------------------------|
| | AFSC 2A1X1 (N=175) | COMP SAMPLE (N=3099) | AFSC 2A1X1 (N=124) | COMP SAMPLE (N=2781) | AFSC 2A1X1 (N=355) | COMP SAMPLE (N=5702) |
| <u>EXPRESSED JOB INTEREST:</u> | | | | | | |
| INTERESTING | 67 | 69 | 62 | 61 | 74 | 69 |
| SO-SO | 18 | 18 | 20 | 26 | 16 | 22 |
| DULL | 14 | 13 | 18 | 12 | 10 | 9 |
| <u>PERCEIVED USE OF TALENTS:</u> | | | | | | |
| FAIRLY WELL TO PERFECT | 72 | 68 | 75 | 70 | 81 | 71 |
| NONE TO VERY LITTLE | 28 | 32 | 23 | 29 | 19 | 21 |
| <u>PERCEIVED USE OF TRAINING:</u> | | | | | | |
| FAIRLY WELL TO PERFECT | 81 | 82 | 71 | 84 | 74 | 79 |
| NONE TO VERY LITTLE | 19 | 11 | 28 | 14 | 26 | 16 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB:</u> | | | | | | |
| SATISFIED | 61 | 68 | 60 | 68 | 69 | 73 |
| NEUTRAL | 19 | 17 | 11 | 15 | 12 | 11 |
| DISSATISFIED | 20 | 15 | 27 | 16 | 19 | 15 |
| <u>REENLISTMENT INTENTIONS:</u> | | | | | | |
| YES OR PROBABLY YES | 55 | 65 | 65 | 80 | 79 | 76 |
| NO OR PROBABLY NO | 44 | 34 | 31 | 19 | 10 | 6 |
| WILL RETIRE | 0 | 0 | 0 | * | 10 | 18 |

NOTE: Columns may not add to 100 percent due to rounding or nonresponse
Comparative data are from AFSCs 2A5X2, 2A6X4, 2A7X2, 2A7X4, 2E3X1, 2F0X1, 2F0X1, and 2W1X1 surveyed in 1994

TABLE 21

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 2A1X1
TAFMS GROUPS IN CURRENT STUDY TO PREVIOUS STUDY
(PERCENT MEMBERS RESPONDING)

| | 1-48 MONTHS TAFMS | | 49-96 MONTHS TAFMS | | | 97+ MONTHS TAFMS | | | |
|--|-------------------|--------|--------------------|-------|--------|------------------|-------|--------|----|
| | 1996 | 1990 | 1996 | 1990 | 1990 | 1996 | 1990 | 1990 | |
| | 2A1X1 | 455XOA | 455XOB | 2A1X1 | 455XOA | 455XOB | 2A1X1 | 455XOA | |
| | N=175 | N=292 | N=679 | N=124 | N=76 | N=104 | N=355 | N=173 | |
| | | | | | | | | 455XOB | |
| | | | | | | | | N=188 | |
| EXPRESSED JOB INTEREST: | | | | | | | | | |
| INTERESTING | 67 | 61 | 50 | 62 | 63 | 50 | 74 | 75 | 58 |
| SO-SO | 18 | 17 | 27 | 20 | 22 | 26 | 16 | 14 | 21 |
| DULL | 14 | 22 | 15 | 18 | 13 | 24 | 0 | 12 | 21 |
| PERCEIVED USE OF TALENTS: | | | | | | | | | |
| FAIRLY WELL TO PERFECT | 72 | 66 | 70 | 75 | 73 | 66 | 81 | 77 | 65 |
| NONE TO VERY LITTLE | 28 | 33 | 30 | 23 | 26 | 34 | 19 | 23 | 35 |
| PERCEIVED USE OF TRAINING: | | | | | | | | | |
| FAIRLY WELL TO PERFECT | 81 | 66 | 72 | 71 | 66 | 66 | 74 | 70 | 61 |
| NONE TO VERY LITTLE | 19 | 33 | 28 | 28 | 33 | 37 | 26 | 30 | 39 |
| SENSE OF ACCOMPLISHMENT FROM JOB: | | | | | | | | | |
| SATISFIED | 61 | 57 | 58 | 60 | 63 | 50 | 69 | 63 | 55 |
| NEUTRAL | 19 | 10 | 17 | 11 | 9 | 18 | 12 | 10 | 13 |
| DISSATISFIED | 20 | 33 | 25 | 27 | 26 | 32 | 19 | 27 | 32 |
| REENLISTMENT INTENTIONS: | | | | | | | | | |
| YES OR PROBABLY YES | 55 | 53 | 49 | 65 | 74 | 74 | 79 | 76 | 79 |
| NO OR PROBABLY NO | 44 | 47 | 51 | 31 | 26 | 26 | 10 | 14 | 10 |
| WILL RETIRE | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 10 | 12 |

NOTE: Columns may not add to 100 percent due to rounding or nonresponse

An examination of job satisfaction data can also reveal the influences performing certain jobs may have on overall job satisfaction. Table 22 presents job satisfaction data for the jobs identified in the career ladder structure for AFSC 2A1X1. Overall, personnel in the ASARS Maintenance job had the lowest job satisfaction.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to provide training personnel with current information on the Avionic Sensors Maintenance career ladder for use in reviewing current training programs and training documents. Overall job progression is normal, and shows a distinct pattern as one moves from the 3-skill level to the 7-skill level. The AFMAN 36-2108 *Specialty Description* broadly describes the jobs and tasks being performed. Job satisfaction is fairly high, and no serious problem areas were noted. Analyses of career ladder documents indicate the STS is supported by survey data.

TABLE 22

JOB SATISFACTION INDICATORS FOR AFSC 2A1X1 JOB GROUPS
(PERCENT MEMBERS RESPONDING)

| | LANTIRN MAINT (STG102) | SENSOR MAINT (STG069) | VIDEO SYS MAINT (STG074) | IR MAINT (STG066) | PAVE TACK MAINT (STG068) | ASARS MAINT (STG135) |
|--|------------------------------|-----------------------------|--------------------------------|-------------------------|-----------------------------------|----------------------------|
| <u>EXPRESSED JOB INTEREST:</u> | | | | | | |
| INTERESTING | 62 | 79 | 68 | 75 | 67 | 45 |
| SO-SO | 21 | 12 | 23 | 17 | 15 | 18 |
| DULL | 17 | 9 | 9 | 8 | 18 | 36 |
| <u>PERCEIVED USE OF TALENTS:</u> | | | | | | |
| FAIRLY WELL TO PERFECT | 73 | 64 | 83 | 83 | 72 | 64 |
| NONE TO VERY LITTLE | 27 | 36 | 16 | 17 | 28 | 34 |
| <u>PERCEIVED USE OF TRAINING:</u> | | | | | | |
| FAIRLY WELL TO PERFECT | 78 | 67 | 79 | 85 | 77 | 55 |
| NONE TO VERY LITTLE | 22 | 33 | 21 | 14 | 23 | 45 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB:</u> | | | | | | |
| SATISFIED | 53 | 64 | 69 | 74 | 54 | 36 |
| NEUTRAL | 17 | 6 | 16 | 11 | 23 | 0 |
| DISSATISFIED | 30 | 30 | 13 | 15 | 23 | 64 |
| OTHER | 0 | 0 | 2 | 0 | 0 | 0 |
| <u>REENLISTMENT INTENTIONS:</u> | | | | | | |
| YES OR PROBABLY YES | 61 | 73 | 78 | 77 | 59 | 73 |
| NO OR PROBABLY NO | 34 | 24 | 16 | 20 | 41 | 27 |
| WILL RETIRE | 2 | 3 | 3 | 3 | 0 | 0 |
| NO RESPONSE | 2 | 0 | 3 | 0 | 0 | 0 |

TABLE 22 (CONTINUED)

JOB SATISFACTION INDICATORS FOR AFSC 2AIX1 JOB GROUPS
(PERCENT MEMBERS RESPONDING)

| | IRADS MAINT (STG159) | PHOTO SYS MAINT (STG096) | SUPV (STG067) | SUPPLY & ADMIN (STG077) | TNG (STG046) |
|---|----------------------------|-----------------------------------|------------------|-------------------------------|-----------------|
| <u>EXPRESSED JOB INTEREST</u> | | | | | |
| INTERESTING | 92 | 62 | 78 | 100 | 100 |
| SO-SO | 8 | 8 | 18 | 0 | 0 |
| DULL | 0 | 30 | 4 | 0 | 0 |
| <u>PERCEIVED USE OF TALENTS</u> | | | | | |
| FAIRLY WELL TO PERFECT | 75 | 70 | 90 | 56 | 80 |
| NONE TO VERY LITTLE | 25 | 30 | 10 | 44 | 20 |
| <u>PERCEIVED USE OF TRAINING</u> | | | | | |
| FAIRLY WELL TO PERFECT | 83 | 62 | 73 | 89 | 90 |
| NONE TO VERY LITTLE | 17 | 38 | 26 | 11 | 10 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB</u> | | | | | |
| SATISFIED | 75 | 69 | 81 | 89 | 100 |
| NEUTRAL | 17 | 15 | 4 | 11 | 0 |
| DISSATISFIED | 8 | 15 | 15 | 11 | 0 |
| <u>REENLISTMENT INTENTIONS</u> | | | | | |
| YES OR PROBABLY YES | 50 | 69 | 78 | 56 | 80 |
| NO OR PROBABLY NO | 42 | 31 | 10 | 0 | 20 |
| WILL RETIRE | 8 | 0 | 12 | 44 | 0 |

NOTE: Columns may not add to 100 percent due to rounding or nonresponse

APPENDIX A
REPRESENTATIVE TASKS PERFORMED BY
MEMBERS OF CAREER LADDER JOBS

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TABLE A1

**LANTIRN MAINTENANCE
(STG102, N=172)**

| TYPICAL TASKS | PERCENT |
|---|---------|
| G286 Remove or install targeting set CEUs | 100 |
| G271 Remove or install LANTIRN ECUs | 100 |
| G257 Perform functional tests on targeting sets | 99 |
| G284 Remove or install nose equipment support assemblies | 99 |
| G265 Perform targeting set focus adjustments | 99 |
| G289 Remove or install navigation or targeting set computers | 99 |
| G260 Perform target acquisition forward looking infrared (FLIR) to deroll alignments | 99 |
| G274 Remove or install navigation or targeting set computers | 99 |
| G247 Perform functional tests on navigation or targeting set environmental control units (ECUs) | 99 |
| G263 Perform targeting set drift and deroll biases | 98 |
| G258 Perform navigation or targeting set dead-channel strap alignments | 98 |
| G264 Perform targeting set FLIR line of sight (LOS) to pitch axis alignments | 98 |
| G305 Service coolanol on LANTIRN ECUs | 97 |
| G255 Perform functional tests on targeting set central electronics units CEUs | 97 |
| G256 Perform functional tests on targeting set power supplies | 97 |
| G301 Repair NESAs | 97 |
| F197 Clean optics or windows | 97 |
| G311 Troubleshoot or repair LANTIRN intermediate automatic test equipment (LIATE) | 96 |
| G254 Perform functional tests on navigation sets | 96 |
| G285 Remove or install targeting set center section assembly SRUs | 96 |
| G250 Perform functional tests on navigation set power supplies | 96 |
| G246 Perform functional tests on navigation or targeting set computers | 96 |
| G267 Perform targeting set position biases | 95 |
| G266 Perform targeting set gain/balance adjustments | 95 |

TABLE A2
SENSOR MAINTENANCE
(STG069, N=33)

| TYPICAL TASKS | PERCENT |
|---|---------|
| F222 Read or interpret schematics | 100 |
| F207 Operate aerospace ground equipment (AGE)o | 97 |
| F223 Read or interpret wiring diagrams | 97 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 94 |
| F233 Remove or replace line replacement units (LRUs) | 94 |
| F199 Connect or disconnect power to aircraft | 91 |
| F227 Remove or replace cockpit control panels | 91 |
| F211 Perform continuity checks | 91 |
| F217 Perform soldering | 88 |
| F218 Perform voltage checks | 85 |
| F197 Clean optics or windows | 82 |
| F200 Construct or repair cables or test plugs | 82 |
| F208 Pack or unpack sensor system equipment | 82 |
| F204 Evaluate videotape for system malfunctions | 79 |
| F212 Perform corrosion control | 79 |
| F225 Remove or replace cable assemblies | 79 |
| F239 Safety wire equipment | 76 |
| F201 Debrief aircrews | 73 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 70 |
| F220 Read or interpret block diagrams | 70 |
| F226 Remove or replace circuit card assemblies | 70 |
| F205 Lubricate mechanical components | 70 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 64 |
| E137 Inventory equipment, tools, or supplies | 61 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 61 |
| F231 Remove or replace electronic components on circuit cards | 58 |

TABLE A3
VIDEO SYSTEMS MAINTENANCE
(STG074, N=116)

| TYPICAL TASKS | PERCENT |
|---|---------|
| K433 Bench check AVTRs | 97 |
| H436 Clean and demagnetize video recording systems | 97 |
| F217 Perform soldering | 95 |
| F204 Evaluate videotape for system malfunctions | 94 |
| K439 Operationally check AVTRs | 92 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 92 |
| F222 Read or interpret schematics | 92 |
| F226 Remove or replace circuit card assemblies | 91 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 91 |
| K434 Bench check CVTRs | 90 |
| K445 Remove or replace AVTR SRUs | 90 |
| F218 Perform voltage checks | 89 |
| F211 Perform continuity checks | 88 |
| K424 Align or adjust airborne videotape recorder (AVTR) drum speeds | 88 |
| K452 Troubleshoot VTRs | 87 |
| K430 Align or adjust cockpit television systems (CTVSs) | 87 |
| F223 Read or interpret wiring diagrams | 87 |
| K451 Troubleshoot CTVSs | 87 |
| F182 Align or adjust electronic components on circuit cards | 85 |
| K431 Align or adjust CTVS electronics units (EUs) | 85 |
| F207 Operate aerospace ground equipment (AGE) | 85 |
| F212 Perform corrosion control | 85 |
| F225 Remove or replace cable assemblies | 85 |
| F200 Construct or repair cables or test plugs | 85 |
| K435 Bench check ground videotape recorders (GVTRs) | 85 |
| F233 Remove or replace line replacement units (LRUs) | 84 |
| K429 Align or adjust capstan speeds | 84 |
| K440 Operationally check CTVSs | 84 |
| K428 Align or adjust AVTR upper head drums | 84 |

TABLE A4
IR MAINTENANCE
(STG066, N=92)

| TYPICAL TASKS | PERCENT |
|---|---------|
| F233 Remove or replace line replacement units (LRUs) | 100 |
| F217 Perform soldering | 100 |
| F226 Remove or replace circuit card assemblies | 98 |
| F222 Read or interpret schematics | 98 |
| F197 Clean optics or windows | 97 |
| F212 Perform corrosion control | 97 |
| I395 Troubleshoot or repair IR receivers | 96 |
| F199 Connect or disconnect power to aircraft | 96 |
| I389 Remove or replace IR SRUs | 95 |
| F201 Debrief aircrews | 95 |
| F182 Align or adjust electronic components on circuit cards | 94 |
| I383 Perform IR gains or balances | 94 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 92 |
| F218 Perform voltage checks | 91 |
| F207 Operate aerospace ground equipment (AGE) | 91 |
| F223 Read or interpret wiring diagrams | 91 |
| F225 Remove or replace cable assemblies | 90 |
| I384 Perform scanner alignments | 90 |
| F208 Pack or unpack sensor system equipment | 90 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 88 |
| I368 Bench check and align IR video or camera assemblies | 88 |
| I382 Perform IR dewar detector focus alignments | 88 |
| F211 Perform continuity checks | 88 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 88 |
| I366 Align or adjust IR receivers | 87 |
| F205 Lubricate mechanical components | 87 |
| I387 Remove or replace IR dewar detector assemblies | 87 |
| F220 Read or interpret block diagrams | 86 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 86 |
| I386 Perform video auxiliary circuit card alignments | 85 |

TABLE A5
PAVE TACK MAINTENANCE
(STG068, N=39)

| TYPICAL TASKS | PERCENT |
|--|---------|
| F197 Clean optics or windows | 97 |
| H334 Bench check, repair, or adjust Pave Tack pitch pinion instrument assemblies (PPIAS) | 95 |
| H341 Remove or replace Pave Tack SRUs | 92 |
| H335 Bench check, repair, or adjust Pave Tack roll instrument assemblies (RIAs) | 92 |
| Q593 Clear or close our completed maintenance discrepancies in CAMS | 90 |
| Q585 Access core automated maintenance discrepancies in CAMS | 90 |
| F223 Read or interpret wiring diagrams | 90 |
| H339 Operationally check Pave Tack systems | 87 |
| F205 Lubricate mechanical components | 87 |
| F212 Perform corrosion control | 87 |
| F211 Perform continuity checks | 87 |
| F232 Remove or replace electronic components, other than on circuit cards, such as light bulbs, fuses, switches, or circuit breakers | 87 |
| F233 Remove or replace line replacement units (LRUs) | 85 |
| H358 Upload or download Pave Tack pods | 85 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 85 |
| F225 Remove or replace cable assemblies | 85 |
| F217 Perform soldering | 85 |
| H336 Boresight Pave Tack pods | 82 |
| H332 Bench check Pave Tack pods | 82 |
| F185 Align or adjust laser assemblies | 82 |
| H316 Align or adjust Pave Tack laser transmitters | 82 |
| F199 Connect or disconnect power to aircraft | 79 |
| F207 Operate aerospace ground equipment (AGE) | 79 |
| F222 Read or interpret schematics | 79 |
| H315 Align or adjust Pave Tack laser optics | 79 |
| F200 Construct or repair cables or test plugs | 79 |
| H317 Assemble or disassemble Pave Tack base sections | 77 |
| F239 Safety wire equipment | 77 |
| F220 Read or interpret block diagrams | 77 |
| F230 Remove or replace desiccant | 77 |

TABLE A6

ASARS MAINTENANCE
(STG135, N=11)

| TYPICAL TASKS | PERCENT |
|---|---------|
| N503 Remove or replace lower U-2 Q-bay hatches | 100 |
| N492 Perform ASARS prelaunch checks | 100 |
| N489 Operationally check ASARS | 100 |
| F207 Operate aerospace ground equipment (AGE) | 100 |
| N499 Remove or replace ASARS noses | 100 |
| F219 Pressurize sensor systems | 100 |
| Q605 Input data in CAMS | 100 |
| N500 Remove or replace ASARS PCU SRUs | 100 |
| N487 Bench check or repair ASARS processor control units (PCUs) | 100 |
| F212 Perform corrosion control | 100 |
| N496 Remove or replace ASARS DCRSs | 100 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 100 |
| N493 Remove or replace airborne radar system (ARS) fiber optics | 100 |
| F227 Remove or replace cockpit control panels | 100 |
| F218 Perform voltage checks | 100 |
| F209 Palletize sensor system equipment | 100 |
| F202 Don or doff protective clothing, such as aprons, goggles, or gloves | 100 |
| N504 Repair ASARS mission data load verifier (MDLV) | 100 |
| N484 Bench check or repair ASARS Digital Cassette Recording Systems (DCRSs) | 100 |
| N488 Bench check or repair ASARS transmitters | 100 |
| F217 Perform soldering | 100 |
| N485 Bench check or repair SARS electronic scan antennas (ESAs) | 100 |
| N501 Remove or replace ASARS receiver/exciter SRUs | 91 |
| N491 Perform ASARS mission data load verifier (MDLV) operations or performance verification | 91 |
| N502 Remove or replace ASARS transmitter SRUs | 91 |
| F208 Pack or unpack sensor system equipment | 91 |
| F222 Read or interpret schematics | 91 |

TABLE A7

**IRADS MAINTENANCE
(STG159, N=12)**

| TYPICAL TASKS | PERCENT |
|--|---------|
| M466 Assemble or disassemble infrared acquisition designation system (IRADS) turrets | 100 |
| M475 Perform IRADS turret minimum performance tests | 100 |
| M471 Perform IRADS laser system alignments | 100 |
| M469 Perform fault isolation tests on IRADS turrets | 100 |
| M474 Perform IRADS turret drive and resolver alignments | 100 |
| Q585 Access core automated maintenance system CAMS menus and data screens | 100 |
| M479 Perform IRADS VTSC minimum performance tests | 100 |
| M478 Perform IRADS VTSC fault isolation tests | 100 |
| M482 Remove or replace IRADS VTSC SRUs | 100 |
| M477 Perform IRADS video tracker servo control (VTSC) electrical alignments | 100 |
| F197 Clean optics or windows | 100 |
| F195 Clean bearings | 100 |
| F189 Align or adjust optics assembly fields-of view | 100 |
| F186 Align or adjust laser control electronics | 100 |
| M481 Remove or replace IRADS servo SRUs | 92 |
| M472 Perform IRADS mechanical video chain alignments | 92 |
| F178 Align laser to infrared (IR) or television (TV) video | 92 |
| Q593 Clear or close out completed maintenance discrepancies in CAMS | 92 |
| F185 Align or adjust laser assemblies | 92 |
| M473 Perform IRADS servo fault isolation tests | 92 |
| F208 Pack or unpack sensor equipment | 92 |
| F181 Align or adjust collimators | 92 |
| F182 Align or adjust electronic components on circuit cards | 83 |
| F223 Read or interpret wiring diagrams | 83 |
| F218 Perform voltage checks | 83 |
| F186 Align or adjust laser control electronics | 83 |

TABLE A8

**PHOTO SYSTEMS MAINTENANCE
(STG096, N=13)**

| TYPICAL TASKS | | PERCENT |
|----------------------|--|----------------|
| O534 | Purge driftsights | 100 |
| O526 | Bench check or repair T-35 camera systems | 100 |
| O532 | Perform T-35 camera preflight or postflight checks | 100 |
| O530 | Perform Iris camera preflight or postflight checks with test and checkout consoles | 100 |
| O524 | Bench check or repair Iris camera systems | 100 |
| O531 | Perform Iris camera temperature stabilization | 100 |
| O549 | Upload or download Iris cameras | 100 |
| O548 | Upload or download Iris camera film | 100 |
| Q593 | Clear or close out completed maintenance discrepancies in CAMS | 100 |
| O529 | Perform Iris camera preflight or postflight checks with flyaway kits | 100 |
| O544 | Salvage waste film | 100 |
| F217 | Perform soldering | 100 |
| O528 | Perform F-489 camera preflight or postflight checks | 100 |
| O523 | Bench check or repair F-489 camera systems | 100 |
| O552 | Upload or download T-35 cameras | 92 |
| O552 | Upload or download T-35 camera film | 92 |
| O542 | Remove or replace U-2 Q-bay inserts | 92 |
| F207 | Operate aerospace ground equipment (AGE) | 92 |
| O533 | Perform temperature stabilizations on cameras | 92 |
| F199 | Connect or disconnect power to aircraft | 92 |
| O541 | Remove or replace U-2 camera system heater blower racks | 92 |
| Q585 | Access core automated maintenance system (CAMS menus and data screens) | 92 |
| F205 | Lubricate mechanical components | 92 |
| O539 | Remove or replace Iris camera SRUs | 92 |
| O522 | bench or repair downsights | 92 |
| O540 | Remove or replace T-35 camera SRUs | 92 |
| O535 | Remove or replace driftsight LRUs | 92 |
| F223 | Read or interpret wiring diagrams | 92 |
| O545 | Thread Iris cameras | 92 |
| O537 | Remove or replace driftsight SRUs | 92 |

TABLE A9

**SUPERVISION
(STG067, N=68)**

| TYPICAL TASKS | PERCENT |
|---|---------|
| A8 Determine or establish work priorities | 97 |
| A2 Assign projects, maintenance, or repair work | 97 |
| C58 Conduct performance feedback sessions | 97 |
| A20 Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting | 96 |
| C86 Write EPRs | 96 |
| C82 Inspect personnel for compliance with military standards | 96 |
| C87 Write recommendations for awards or decorations | 96 |
| B34 Counsel personnel on personal matters | 94 |
| B48 Interpret policies, directives, or procedures for subordinates | 90 |
| E164 Review messages | 87 |
| A23 Plan or schedule work assignments or priorities | 85 |
| C72 Evaluate personnel for compliance with performance standards or technical orders | 85 |
| D107 Evaluate progress of trainees | 85 |
| C73 Evaluate personnel for promotion, demotion, reclassification, or special awards | 85 |
| D109 Maintain training records, charts graphs, or files | 85 |
| D106 Evaluate personnel for training needs | 84 |
| B52 Supervise Avionic Sensors Maintenance Craftsmen (AFSC 2A151) | 82 |
| A17 Establish performance standards for subordinates | 82 |
| B33 Conduct supervisory orientations of newly assigned personnel | 82 |
| A29 Schedule personnel for temporary duty (TDY) assignments, leaves, or passes | 81 |
| Q585 Access core automated maintenance system (CAMS) menus and data screens | 79 |
| E118 Compile information for records, reports, or logs | 79 |
| A19 Establish work schedules | 79 |
| A18 Establish work methods or procedures | 79 |
| D96 Counsel trainees on training progress | 79 |
| B35 Direct development or maintenance of status indicators, such as boards, graphs, or charts | 76 |
| C60 Conduct self-inspections | 76 |

TABLE A10
SUPPLY AND ADMINISTRATION
(STG077, N=9)

| TYPICAL TASKS | PERCENT |
|---|---------|
| A20 Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting | 100 |
| A6 Determine logistics requirements, such as personnel, equipment, space, tools, or supplies | 100 |
| E133 Initiate electronic mail (E-mail) | 89 |
| E164 Review messages | 89 |
| E131 Identify and report equipment or supply problems | 89 |
| E122 Coordinate supply matters with appropriate agencies | 89 |
| E162 Research supply requisition data, such as supply catalogs or master cross-reference listings (MCRLs) | 89 |
| A10 Develop equipment justifications or requirements | 89 |
| E141 Maintain administrative files | 89 |
| E121 Coordinate TDY orders, passports, or visas with appropriate agencies | 89 |
| A5 Coordinate communications requirements with appropriate agencies | 89 |
| A26 Review drafts of regulations, manuals, or other directives | 89 |
| E119 Coordinate local purchases of equipment, tools, or supplies with appropriate agencies | 89 |
| E125 Draft messages | 78 |
| E128 Draft requests for TDY orders, passports, or visas | 78 |
| E118 Compile information for records, reports, or logs | 78 |
| C78 Identify problem areas using deficiency or service reports | 78 |
| A22 Plan or prepare briefings | 78 |
| C65 Evaluate deficiency, service, or status reports | 78 |
| E159 Prepare requisitions for equipment, tools, or supplies, other than for local purchase | 78 |
| A9 Develop cost-reduction programs | 78 |
| B39 Draft recommendations for policy changes in logistics requirements, such as personnel, equipment, tools, or supplies | 78 |

TABLE A11
TRAINING
(STG046, N=10)

| TYPICAL TASKS | PERCENT | |
|---------------|---|-----|
| D93 | Conduct resident course classroom training | 100 |
| D90 | Administer or score tests | 100 |
| D95 | Conduct or develop training materials or aids | 90 |
| D115 | Write test questions | 90 |
| C72 | Evaluate personnel for compliance with performance standards or technical orders | 70 |
| D109 | Maintain training records, charts, graphs, or files | 70 |
| D96 | Counsel trainees on training progression | 70 |
| D113 | Procure training aids, space, or equipment | 70 |
| D108 | Evaluate e training methods and techniques | 60 |
| D105 | Evaluate or inspect training materials or aids for operation or suitability | 60 |
| F220 | Read or interpret block diagrams | 60 |
| A20 | Participate in general meetings, such as staff meetings, briefings, conferences, and workshops, other than conducting | 60 |
| E137 | Inventory equipment, tools, or supplies | 60 |
| B34 | Counsel personnel on personal matters | 60 |
| F197 | Clean optics or windows | 60 |
| F182 | Align or adjust electronic components on circuit cards | 60 |
| D103 | Evaluate effectiveness of training programs | 50 |
| D107 | Evaluate progress of trainees | 50 |
| C82 | Inspect personnel for compliance with military standards | 50 |
| A7 | Determine or establish publication requirements | 50 |
| F216 | Perform signal adjustments | 50 |
| F222 | Read or interpret schematics | 50 |
| F185 | Align or adjust laser assemblies | 50 |
| C60 | Conduct self-inspections | 40 |
| D101 | Direct or implement training programs | 40 |